

Observations on *Problema bulenta*

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The rare skipper, *Problema bulenta* (Boisduval and LeConte), is uncommonly observed and has never been photographed in nature. Here we report behavioral and flower use observations made in July, 1984 at Blackwater National Wildlife Refuge, Dorchester County, Maryland.

Previous nectar utilization has been reported by Jones (1926), who observed the species visiting pickerelweed (*Pontederia cordata*) in North Carolina and by Covell and Straley (1973), who reported *bulenta* visiting swamp milkweed (*Asclepias incarnata*) in Virginia. At the Maryland locality *P. bulenta* was fairly abundant and was observed by several persons, and as a result, more flower visiting observations were possible. The primary nectar source at Blackwater NWR was buttonbush (*Cephalanthus occidentalis*). Secondary nectar sources observed were the two previously reported, swamp milkweed and pickerelweed, as well as red clover (*Trifolium pratense*) and dogbane (*Apocynum cannabinum*) (J. Fales, W. Grooms, R. Smith, pers. comm.).

In 1984, adults were seen from June 20 to July 14 — being most common later in the flight period. Our observations and those of J. Fales indicate that females are seldom seen at flowers and vary from 4 to 10 males seen for every female. Females may spend more time in the immediate vicinity of their host — suspected to be a large grass. Adults fly very close to the water at all times; most were seen within 30 cm. The highest above water was one seen 1.5 m. The flight is rapid, strong and noisy. Individuals seem to return again and again to the same area of a nectar plant. When visiting buttonbush these skipper usually visit low flowers preferring to rest on the under surface of the inflorescence, a site that is often in shadow. At the Maryland locality the wind blows almost constantly in variable gusts. The butterflies at flowers are constantly turning and moving from flower to flower. Flower visitation is from 10.00 to 15.00 hr; after that time the butterflies are no longer to be found.

Other butterflies sharing the buttonbush flowers with *P. bulenta* were *Epargyreus clarus*, *Erynnis horatius*, *Ancyloxipha numitor*, *Wallengrenia egeremet*, *Poanes viator* (abundant), *Phyciodes tharos*, and *Vanessa virginiensis*.

This skipper is very difficult to photograph. One must go into the river's water or stand at its muddy edge. This together with the almost constant wind, and the low, nervous flight of the insect makes such attempts trying at best.

The habitat is similar to that found along the Chickahominy River in Virginia (Covell and Straley, 1973). It seems likely the Maryland colony is univoltine as suggested by Opler and Krizek (1984). Further investigation is necessary to reveal the host plant and reproductive biology of this uncommon insect.

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Literature Cited

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